



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,928	01/29/2002	Michel Daage	JSS-0206	9576

7590 09/22/2003
ExxonMobil Research and Engineering Company
P.O. Box 900
Annandale, NJ 08801-0900

9
EXAMINER

STRICKLAND, JONAS N

ART UNIT	PAPER NUMBER
----------	--------------

1754

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N . 10/059,928	Applicant(s) DAAGE ET AL.	
	Examiner Jonas N. Strickland	Art Unit 1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> . | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Response to Amendment

1. This Detailed Action is in response to the amendment filed on 7/9/03 as Paper No. 8. Claims 1-25 are currently pending. Claims 1, 19, 20, and 21 have been amended.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

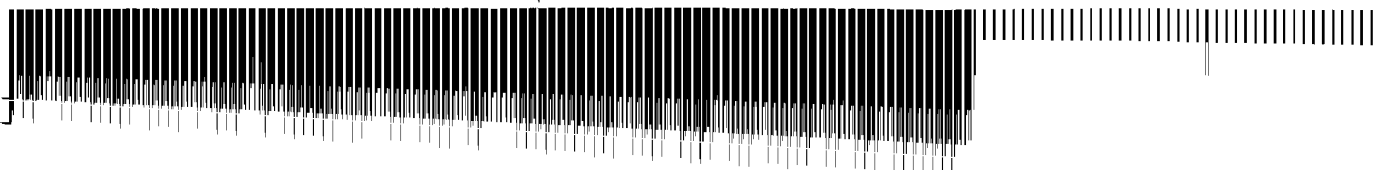
3. Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which, was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant recites, "oxidizing the impregnated catalyst" in claims 1, 19, 20, and 21. This limitation is not supported or described in the specification. The specification only describes oxidizing a catalyst, in the presence of an impregnating solution to form an oxidized catalyst.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.



Application/Control Number: 10/059,928

Art Unit: 1754

5. Claims 1-25 are rejected under 35 U.S.C. 102(a) as being anticipated by Lapidus et al. (US Patent 6,331,574 B1).

Applicant claims a process for the treatment of a used, supported catalyst comprising one or more members selected from the group consisting of Co, Ni, Cu, Ru, Rh, Re, Pd, Pt, Os, and Ir, the process comprising the following steps: decreasing the hydrocarbon content; impregnating under a non-oxidative atmosphere with a solution of at least one of an ammonium salt and an alkyl ammonium salt, optionally in combination with up to about five moles of ammonia per liter of solution; oxidizing with a gaseous oxidant in the presence of the impregnating solution; and reducing with a hydrogen-containing gas at elevated temperatures thereby forming an active catalyst.

Lapidus et al. discloses a process for the preparation of high activity carbon monoxide hydrogenation catalysts, especially for Fischer-Tropsch reactions. Lapidus et al. continues to disclose wherein the catalyst contains cobalt as well as rhenium or metals from Group VIIB, which are supported on a refractory inorganic oxide support (col. 1, lines 34-37 and col. 2, lines 20-31). Lapidus et al. continues to disclose wherein the catalyst is contacted with a liquid or solution (a solvent, which would inherently decrease the hydrocarbon content; col. 3, lines 39-41). Lapidus et al. continues to disclose impregnating the catalyst with a poly- or multidentate ligandous compound, such as an ammonium containing salt (col. 5, line 55 - col.6, line 38). Lapidus et al. continues to disclose wherein after impregnation, the catalyst may be dried, and calcined ; suitably by contact with oxygen, air or other oxygen containing gases, as well as wherein the catalyst is reduced with a hydrogen-containing gas (col. 2, lines 1-6).

Art Unit: 1754

The oxidation step occurs at 100°C (col. 5, line 21). Lapidus et al. continues to disclose wherein the catalyst is reduced under hydrogen at 400°C (col. 16, lines 43-45). Lapidus et al. continues to disclose a fractionator, with respect to claims 23 and 25 (col. 8, line 45).

With respect to claim 4, the impregnated solution disclosed by Lapidus is less than an amount that would be required to convert the catalytic metal to the corresponding salt.

With respect to claims 5 and 6, it would have inherent to have nitrates, carbonates, acetate, citrate and carboxylate as the ammonium salts, since Lapidus et al. discloses impregnating any suitable ammonium salt.

With respect to claims 7, 10, 11 and 16, it would have been inherent for the impregnating solution to meet the desired pore volume, the oxidant atmosphere, as well as the concentration of ammonia, since Lapidus et al. discloses wherein impregnating a supported catalyst with an ammonium salt increases the activity of a used catalyst, as well as having an oxidant atmosphere, which may also include a non-oxidative gas (col. 2, lines 1-6).

Response to Arguments

6. Applicant's arguments filed 7/9/03 have been fully considered but they are not persuasive. Applicant argues wherein the catalyst treatment disclosed by Lapidus et al. uses either an aqueous solution or a molten wax solution, neither of which will dewax a spent catalyst. Furthermore, Applicant argues wherein Lapidus treats his catalyst with chelating agents, but not in a non-oxidizing atmosphere. Applicant finally argues

Art Unit: 1754

wherein Lapidus does not oxidize the catalyst in the presence of the impregnating solution.

However, Lapidus et al. clearly teaches wherein the catalyst activity of a catalyst, such as a Fischer-Tropsch catalyst is increased by hydrogen reduction and treatment with a chelating compound, such as an ammonium salt compound. Furthermore, Lapidus et al. teaches wherein the impregnated support is then oxidized (col. 5, lines 17-22). Therefore, the catalyst treatment process as taught by Lapidus et al. teaches wherein the impregnated catalyst is oxidized.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH. 7:30-5:00, off 1st Friday.

Art Unit: 1754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0661.



Jonas N. Strickland
September 15, 2003

STEVEN BOS
PRIMARY EXAMINER
GROUP 1100

